

Educator Toolkit

REMOTE LEARNING WITH MINECRAFT

We have compiled this set of resources to support remote learning using Minecraft: Education Edition, including a guide to getting started with Minecraft, STEM curriculum and project-based learning activities so educators can use the platform to deliver assignments and keep students engaged, even if they can't play and learn together in the same room.

[EDUCATION.MINECRAFT.NET](https://education.minecraft.net)

What is Minecraft: Education Edition?

Minecraft: Education Edition is a game-based learning platform that builds STEM skills, unleashes creativity and engages students in collaboration and problem-solving. Minecraft helps educators meet students where they are and inspires deep, meaningful learning across subjects. Educators around the world use Minecraft: Education Edition to teach lessons, build STEM and social-emotional skills and inspire project-based learning. Minecraft: Education Edition offers special features designed for educational use, including assessment tools and classroom multiplayer to allow learners to work together in the immersive game environment. See [examples](#) of how educators around the world are using Minecraft: Education Edition in their classrooms.

Quick Start

You don't need to be an expert Minecraft player to start teaching with Minecraft: Education Edition! Get started by downloading the app and exploring free online tutorials, lessons and support resources for educators.

1. CHECK THAT YOUR ACCOUNT IS ELIGIBLE

Minecraft: Education Edition is available through June 2020 for all educators and learners who have a valid Office 365 Education account. [Click here to see if your school account is eligible](#). If you have a valid account, [fill out this form](#) to request access to Minecraft: Education Edition. (If you do not have a valid account, download the app below for a free demo lesson.)

2. DOWNLOAD THE APP

[Download Minecraft: Education Edition for Windows, Mac, or iPad](#). Follow the directions on the page to ensure your device is setup to support Minecraft.

3. TIPS FOR TEACHING WITH MINECRAFT

[Visit our free online course for educators](#) on the Microsoft Education Community to learn the basics of Minecraft: Education Edition. [Download this Starter Guide](#) for tips on getting started with Minecraft in your school, including classroom management.



4. EXPLORE FREE LESSONS & CURRICULUM

Minecraft: Education Edition offers hundreds of free **lessons, curriculum and creative challenges** across subjects. This toolkit provides a list of suggested remote learning activities, and you can find even more on our [website](#).

If you're looking for a good starting point, try a **Minecraft build challenge**. These are engaging mini-challenges that can energize students, spark creativity and integrate with curriculum. These can be used for synchronous learning with students working together in a virtual environment, or as assignments that are shared back with the educator or students once completed. Minecraft offers students a creative space to build, model, or design an environment to demonstrate their understanding of a topic. Here are a few examples:

- Design a garden that is $\frac{1}{4}$ carrots, $\frac{1}{2}$ wheat, and $\frac{1}{4}$ beetroot.
- Create a model of an animal cell and label the parts of the cell.
- Build a monument to commemorate a historical event.
- Using context clues from a story, build a scene in Minecraft.

There are also dozens of pre-made [build challenges](#) on topics ranging from the International Space Station and biodiversity to creative writing and art.

Key Features for Assessment and Collaboration

Minecraft: Education Edition includes several features that support collaboration and help educators create more inclusive classrooms, whether students are learning in person or remotely. These include multiplayer mode, formative assessment tools like the Camera and Book & Quill, export options to help students share their work outside the game, and Immersive Reader to support reading and translating.

Students can learn and play in a collaborative environment simultaneously by using **multiplayer mode**. To play together in multiplayer, each individual's home network must satisfy the requirements outlined in our article on [how to set up a multiplayer game](#). This resource also includes a helpful video and instructions for educators to get started with setting up a multiplayer experience.



There are several ways to **evaluate student work** with Minecraft: Education Edition using built-in formative assessment tools. Students can use the [Camera and Book & Quill](#) to screenshot what they build and record ideas and observations before **exporting as PDF** to share outside of Minecraft. Another option is to have students create **narrated screen recordings** to explain their work.

Curriculum Kits

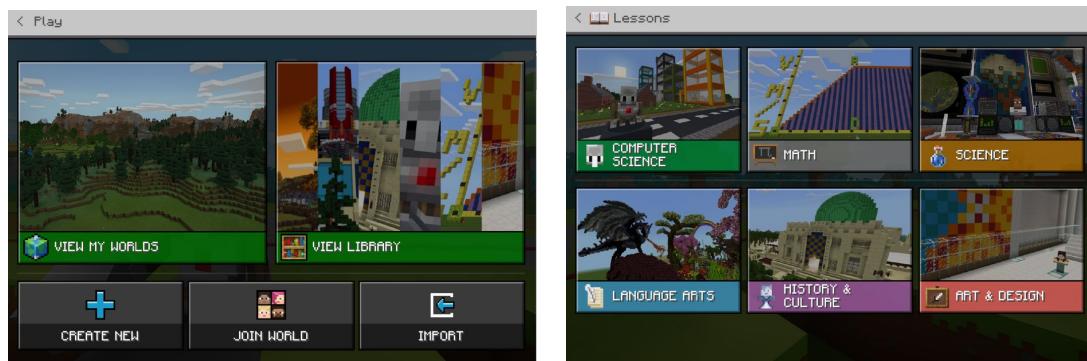
KIT NAME	HOURS	LEARNING OUTCOMES	STANDARDS
Classroom Build Challenges	50+	These build challenges engage students' creativity and strengthen 21 st century skills on topics ranging from the International Space Station and biodiversity to creative writing and art.	Multi-disciplinary activities suitable for a variety of standards applications
Art & Design Learning Pack	14+	This collection of lessons will support learning of patterns & motifs, art composition, self-expression, and creativity for students age 6-13.	Washington State Learning Standards
Computing with Minecraft Kit	20	Computing with Minecraft curriculum teaches beginners how to use block-based coding to create loops, debug code, build functions, learn about A.I., create animations, and more.	CSTA K-12
Math Grade 3 Lesson Kit	23	Grade 3 Standards Alignment Guide showing lesson summaries, standards, and links to activities	Common Core Grade 3
Math Grade 4 Lesson Kit	29	Grade 4 Standards Alignment Guide showing lesson summaries, standards, and links to activities	Common Core Grade 4
Math Grade 5 Lesson Kit	28	Grade 5 Standards Alignment Guide showing lesson summaries, standards, and links to activities	Common Core Grade 5



Conservation	8	<p>The Extinction Safari lesson pack explores charismatic extinct species, causes of extinction and what we can do to stop the biodiversity crisis.</p> <p>We are the Rangers is a series of wildlife conservation lessons and Minecraft worlds for students ages 8-13 developed in partnership with United for Wildlife.</p>	NGSS
Social-Emotional Learning	3	<p>The social-emotional learning lessons for students age 8-13 includes lessons covering mindfulness, self-awareness, communication, self-expression, and digital citizenship.</p>	ISTE Digital Citizenship and Washington State SEL Standards
Chemistry Lesson Kit	10	<p>Chemistry in Minecraft lessons and activities to deliver immersive learning opportunities related to basic chemistry concepts. Includes a teacher's lab book on how to use the chemistry resource pack.</p>	NGSS

Individual Lessons

In addition to the curriculum kits, Minecraft: Education Edition offers hundreds of other free [lessons](#) across a range of topics to consider for remote learning. Students working outside of the classroom can complete the lessons individually or collaboratively in multiplayer mode. Lesson templates are available for educators to remix the content for their students' needs. Educators can also create their own lessons based on a collection of Minecraft worlds and biomes that can be found in the Minecraft: Education Edition in-game Library:



LANGUAGE ARTS:

<u>Shipwreck Narrative</u>	Imagine a world where pirates roamed the seven seas and write a narrative about a mysterious shipwreck.
<u>Fantastic Mr. Fox</u>	Identify how words and phrases supply meaning to a story, create your own narrative, and build an underground world in Minecraft.
<u>Fairy Tale Reimagined</u>	Recreate a fairy tale inside of Minecraft and demonstrate an understanding of digital storytelling.
<u>A Home from Home (Swiss Family Robinson)</u>	Build a home on the island based on descriptions from the text of Swiss Family Robinson.
<u>Instructional writing task</u>	Build a structure and write down a set of step-by-step instructions for others to follow so that they can re-create their build.
<u>Time Machine</u>	Re-imagine a space in your community, school, or home. What will the space look like 100 years in the future? What did it look like 100 in the past?

MATH:

<u>Area and Volume</u>	Use Minecraft to create and solve problems involving area and volume.
<u>Javelin Line Plots</u>	Students will throw 10 tridents and track their distance on a line plot graph.
<u>Minecraft Marathon</u>	Solving addition and subtraction problems using decimals and fractions.

SCIENCE:

<u>Renewable Energy</u>	Introduce students to alternative energy sources by having them build homes that make use of renewable energy in different Minecraft biomes.
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Science Island

Science Island was designed to allow students of all ages to formulate, test and modify a hypothesis before generating a rule which they believe true.

Human and Elephants

Students investigate real-world land management and wildlife conservation issues.

SOCIAL STUDIES:

Exploring Contour Maps

Students create and explore contour maps within the world of Minecraft.

Meet and Greet

Students ask a person from history what life was like in the past in this immersive history research lesson.

Round City of Baghdad

This map contains the fabled 8th century round city of Baghdad built by students on a massive 1:2 scale with a high degree of historical accuracy.

ART AND DESIGN:

College of Art

Students learn about elements and principles of art in creative portal regions, then build an artwork in a collaborative gallery space.

Minecraft Meets Art

Students incorporate Art, Technology, ELA and more to recreate Art from famous museums and research the artists.

Pixel Selfies

Students use Minecraft blocks as “pixels” to produce pixel art versions of themselves, portrait or full body.

COMPUTER SCIENCE:

2019 Hour of Code: A.I. for Good

Self-directed introduction to block-based coding and A.I. for students who are just starting to learn how to code.



Additional Resources

- Learn more about Minecraft Education Edition, join our community, and find technical support at education.minecraft.net.
- For more inspiration on remote learning from Microsoft Education, learn how to get started using [Microsoft Teams to communicate with students and deliver remote learning lessons](#) and see how [Flipgrid](#) is helping schools and families stay connected.
- [Find tips for using Minecraft: Education Edition lessons with other versions of Minecraft](#) for Minecraft players who may not have access Minecraft: Education Edition licenses.

Acknowledgements

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